

Variance Table**Table 10**

| S | Hugo | GID | OMIM ID | VGX Symbol | Description |
|------|----------------|-----------|---------|------------|---------------------|
| | Variance Start | Variance | | | |
| 1 | U73338 | U73338 | 156570 | GEN-69 | Methionine Synthase |
| 10 | 194 | (-201)C>G | 5' | | |
| | 284 | (-111)C>T | 5' | | |
| 1136 | | 742G>A | V248M | | |
| 1252 | | 858C>T | Silent | | |
| 1334 | | 940G>A | D314N | | |
| 1699 | | 1305T>C | Silent | | |
| 3150 | | 2756A>G | D919G | | |
| 3207 | | 2813G>T | S938I | | |
| 3209 | | 2815G>C | G939R | | |
| 5444 | | 5050C>A | 3' | | |
| 5551 | | 5157G>A | 3' | | |
| 20 | 5573 | 5179C>T | 3' | | |
| | 5659 | 5265T>C | 3' | | |
| 5678 | | 5284T>C | 3' | | |
| 5874 | | 5480C>T | 3' | | |
| 5934 | | 5540A>G | 3' | | |
| 2. | D78586 | D78586 | 114010 | GEN-BR | CAD PROTEIN |
| | 3434 | 3408C>T | Silent | | |
| | 4313 | 4287T>C | Silent | | |
| | 4799 | 4773A>G | Silent | | |
| | 5255 | 5229C>T | Silent | | |
| | 5455 | 5429G>A | R1810Q | | |
| | 5507 | 5481T>C | Silent | | |
| | 5810 | 5784C>T | Silent | | |
| | 6128 | 6102C>T | Silent | | |
| | 6626 | 6600C>T | Silent | | |

| | | | | |
|----|--------|---------------|--------|--|
| | 6686 | 6660C>T | Silent | |
| | U09178 | U09178 | 274270 | GEN-HA |
| | 166 | 85T>C | C29R | Dihydropyrimidine Dehydrogenase |
| 5 | 577 | 496A>G | M166V | |
| | 638 | 557A>G | Y186C | |
| | 1708 | 1627A>G | I543V | |
| | 3432 | 3351T>C | 3' | |
| | 3682 | 3601C>T | 3' | |
| | 3730 | 3649G>A | 3' | |
| | 3925 | 3844A>G | 3' | |
| | 3937 | 3856T>C | 3' | |
| | U19720 | U19720 | 600424 | GEN-J1 |
| | 175 | 80G>A | R27H | Folate Transporter (SLC19A1) |
| | 341 | 246C>G | Silent | |
| 15 | 791 | 696C>T | Silent | |
| | 1067 | 972G>A | Silent | |
| | 1337 | 1242C>A | Silent | |
| | 1997 | 1902T>C | 3' | |
| | 2100 | 2005~2006insG | 3' | |
| 20 | 2582 | 2487T>G | 3' | |
| | 2617 | 2522C>T | 3' | |
| | 2652 | 2557T>C | 3' | |
| | U92868 | U92868 | 600424 | GEN-LUK |
| | 431 | 431A>G | Intron | Homo sapiens reduced folate carrier (RFC1) gene, exons 1a, 1c and 1b |
| | 441 | 441A>G | Intron | |
| | 498 | 498C>T | Intron | |
| | 579 | 579G>C | Intron | |
| | 599 | 599G>C | Intron | |
| | X02308 | X02308 | 188350 | GEN-KL |
| | 1066 | 961T>C | 3' | Thymidylate synthetase |
| | 1136 | 1031A>G | 3' | |
| | 1497 | 1392T>A | 3' | |
| 30 | D00517 | D00517 | 188350 | GEN-LUC |
| | 276 | 276C>T | Intron | Thymidylate synthase, promoter |
| | 321 | 321T>C | Intron | |
| 35 | 452 | 452G>A | Intron | |

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|----|--------|---------------|---------|---|
| | 457 | 457^insC | Intron | |
| | 491 | 491C>A | Intron | |
| | 533 | 533T>C | Intron | |
| | 624 | 624A>C | Intron | |
| 5 | 639 | 639A>G | Intron | |
| | 655 | 655T>C | Intron | |
| | D00596 | D00596 188350 | GEN-LUD | Homo sapiens gene for thymidylate synthase, exons 1, 2, 3, 4, 5, 6, 7, complete cds |
| | 701 | 701A>C | Intron | |
| | 716 | 716A>G | Intron | |
| | 732 | 732T>C | Intron | |
| | 1293 | 1293A>G | Intron | |
| | 1322 | 1322C>G | Intron | |
| | 1379 | 1379T>C | Intron | |
| | 1590 | 1590C>T | Intron | |
| 15 | 1688 | 1688C>G | Intron | |
| | 2401 | 2401A>G | Intron | |
| | 2429 | 2429G>A | Intron | |
| | 2488 | 2488C>T | Intron | |
| | 2594 | 2594G>T | Intron | |
| | 2618 | 2618G>A | Intron | |
| | 3083 | 3083G>A | Intron | |
| | 3125 | 3125G>A | Intron | |
| | 3212 | 3212C>T | Intron | |
| | 3619 | 3619T>A | Intron | |
| | 3635 | 3635G>A | Intron | |
| | 4256 | 4256G>A | Intron | |
| | 4898 | 4898A>G | Intron | |
| | 5006 | 5006C>T | Intron | |
| | 5062 | 5062G>A | Intron | |
| | 5167 | 5167G>A | Intron | |
| | 11069 | 11069A>G | Intron | |
| | 11238 | 11238C>T | Intron | |
| | 11293 | 11293T>G | Intron | |
| | 11422 | 11422T>C | Intron | |
| | 11686 | 11686C>T | Intron | |
| | 12598 | 12598T>C | Intron | |
| 30 | | | | |
| 35 | | | | |

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|--------|----|-------------------------|---------|----------------|---|-----|--|
| | | | | | | | |
| 13171 | | 13171T>C | | | | | |
| 13298 | | 13298G>A | | | | | |
| 13645 | | 13645T>C | | | | | |
| 13751 | | 13751C>A | | | | | |
| 13782 | | 13782T>C | | | | | |
| 13806 | | 13806T>C | | | | | |
| 13813 | | 13813T>C | | | | | |
| 14479 | | 14479A>G | | | | | |
| 14546 | 11 | 14546 ^a insT | | | | | |
| 14585 | | 14585C>T | | | | | |
| 14729 | | 14729G>A | | | | | |
| 14787 | | 14787C>T | | | | | |
| 14795 | | 14795G>A | | | | | |
| 15041 | | 15041T>C | | | | | |
| 15343 | 15 | 15343G>A | | | | | |
| 15449 | | 15449G>A | | | | | |
| 15502 | | 15502G>A | | | | | |
| 15545 | | 15545C>T | | | | | |
| 15589 | | 15589A>G | | | | | |
| 15769 | | 15769C>T | 3' | | | | |
| 15839 | | 15839A>G | 3' | | | | |
| 16148 | | 16148G>A | 3' | | | | |
| 16198 | | 16198T>G | 3' | | | | |
| 16202 | | 16202G>T | | | | | |
| X59618 | 20 | X59618 | 180390 | GBN-M3 | Ribonucleotide reductase M2 polypeptide | | |
| 128 | | (-67)G>A | | S ^b | | | |
| 189 | | (-6)T>G | | S ^b | | | |
| 524 | | 330C>G | | Silent | | | |
| 1399 | | 1205T>A | | 3' | | | |
| 1464 | 30 | 1464 | 1270G>A | 3' | | | |
| 1636 | | 1636 | 1442C>T | 3' | | | |
| 1738 | | 1738 | 1544C>T | 3' | | | |
| 2259 | | 2259 | 2065T>C | 3' | | | |
| S72487 | 35 | S72487 | 131222 | GEN-3LD | Thymidine phosphorylase, partial | D7N | |
| 183 | | | 19G>A | | | | |
| 483 | | | 319C>T | | | | |

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| | | | | | | | | |
| 601 | | 437G>C | 3' | | | | | |
| 1299 | | 1135G>A | 3' | | | | | |
| M58602 | M58602 | 131222 | GEN-LUB | Thymidine phosphorylase, promoter and genomic | | | | |
| 124 | | 124C>T | 3' | | | | | |
| 439 | | 439G>A | 3' | | | | | |
| 5 | 1044 | 1044^insCT | 3' | | | | | |
| 1331 | | 1331G>A | 3' | | | | | |
| 1977 | | 1977G>A | Intron | | | | | |
| 2149 | | 2149G>A | Intron | | | | | |
| 2467 | | 2467A>G | Intron | | | | | |
| 2634 | | 2634C>G | Intron | | | | | |
| 2975 | | 2975G>A | Intron | | | | | |
| 3116 | | 3116G>T | Intron | | | | | |
| 3255 | | 3255A>C | Intron | | | | | |
| 15 | 3344 | 3344T>C | Intron | | | | | |
| 4051 | | 4051C>A | Intron | | | | | |
| 4782 | | 4782G>A | Intron | | | | | |
| 5022 | | 5022T>C | Intron | | | | | |
| 5266 | | 5266G>A | Intron | | | | | |
| 5285 | | 5285C>G | Intron | | | | | |
| 5438 | | 5438T>A | Intron | | | | | |
| 5482 | | 5482C>T | Intron | | | | | |
| 5629 | | 5629G>A | Intron | | | | | |
| 5648 | | 5648C>T | Intron | | | | | |
| 25 | 5731 | 5731G>A | Intron | | | | | |
| M98045 | M98045 | 136510 | GEN-4C3 | Homo sapiens folypolyglutamate synthetase mRNA, complete cds | | | | |
| 802 | | 732C>T | Silent | | | | | |
| 1747 | | 1677G>T | 3' | | | | | |
| 1900 | | 1830T>C | 3' | | | | | |
| 30 | U24253 | U24253 | 136510 | GEN-LUE | Human folypolyglutamate synthetase (FPGS) gene, exons 5-11, and partial cds | | | |
| 1424 | | 1424C>A | Intron | | | | | |
| 1649 | | 1649G>A | Intron | | | | | |
| 2554 | | 2554A>G | Intron | | | | | |
| U24252 | U24252 | 136510 | GEN-LUF | Folypolyglutamate synthetase, promoter and exons 1-4 | | | | |
| 263 | | 263A>G | Intron | | | | | |
| 266 | | 266G>T | Intron | | | | | |

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|----|----------|----------|--------|---------|---|--|--|
| | 527 | 527C>G | Intron | | | | |
| | 1037 | 1037A>G | 5' | | | | |
| 5 | 1139 | 1139G>A | Intron | | | | |
| | 1217 | 1217C>T | Intron | | | | |
| | 1647 | 1647C>T | Intron | | | | |
| | 1955 | 1955G>A | Intron | | | | |
| | 2017 | 2017G>A | Intron | | | | |
| | 2037 | 2037G>A | Intron | | | | |
| | 2189 | 2189A>G | Intron | | | | |
| 10 | 2282 | 2282C>T | Intron | | | | |
| | 2309 | 2309A>G | Intron | | | | |
| | U09806 | U09806 | 236250 | GEN-4FZ | Human methylenetetrahydrofolate reductase mRNA, partial cds | | |
| | 120 | 120T>C | Silent | | | | |
| | 464 | 464T>G | M155R | | | | |
| 15 | 519 | 519C>T | Silent | | | | |
| | 668 | 668C>T | A223V | | | | |
| | 1059 | 1059T>C | Silent | | | | |
| | 1289 | 1289C>A | 3' | | | | |
| | 1308 | 1308T>C | 3' | | | | |
| 20 | 1784 | 1784G>A | 3' | | | | |
| | AF061655 | AF061655 | 123920 | GEN-LUJ | Cytidine deaminase, promoter | | |
| | 575 | 575T>C | Intron | | | | |
| | 648 | 648T>C | Intron | | | | |
| | 771 | 771G>C | Intron | | | | |
| 25 | 883 | 883G>A | Intron | | | | |
| | 941 | 941^insC | 5' | | | | |
| | 1051 | 1051A>C | K27Q | | | | |

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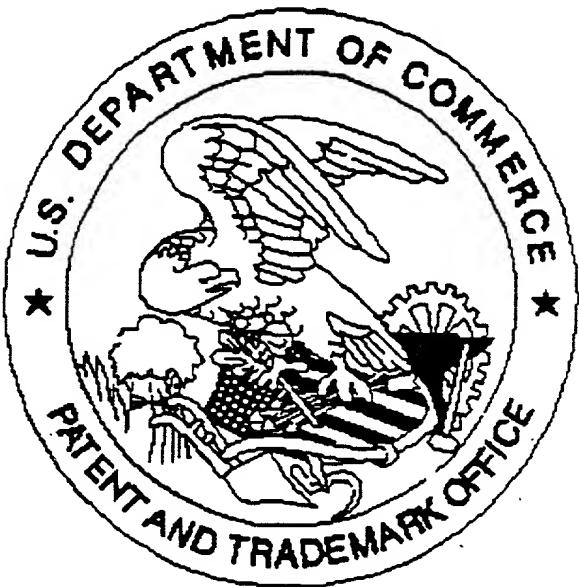
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